

# ABSTRACT

There are provided a polyester fiber which maintains fiber properties such as heat resistance and strength and  
5 elongation possessed by a common polyester fiber, has excellent flame retardance, setting properties, transparency, devitrification resistance, stickiness reduction, and combing properties required for artificial hair, and has luster controlled according to need, and  
10 artificial hair using the same.

Specifically, the present invention relates to a flame retardant polyester fiber for artificial hair, which is obtained by melt spinning a composition as a mixture of 100 parts by weight of (A) a polyester made of  
15 one or more of polyalkylene terephthalate and a copolymer polyester comprising polyalkylene terephthalate as a main component with 5 to 30 parts by weight of (B) a brominated epoxy flame retardant.

The present invention also relates to the polyester  
20 fiber for artificial hair which has at least one modified cross-section, is a mixture with a fiber having a modified cross-section, and has a mixing ratio of the fiber having a round cross-section to the fiber having a modified cross-section is 8:2 to 1:9, and to the flame  
25 retardant polyester fiber for artificial hair which further comprises a hydrophilic fiber treating agent

attached thereto, and thus has excellent smooth feeling, combing properties, and flame retardance.